

NO. 143

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay E
Joint Welding Procedure GTAW
Part number and Job number D350636 04 / B37279

TEST WELDS REQUIRED

BASE METAL Aluminum WELDING PROCESS Tig
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical Down <input type="checkbox"/> Up <input type="checkbox"/>			
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>	
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>	
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>	
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>	

Crossbolt Spacer Welded into NA Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

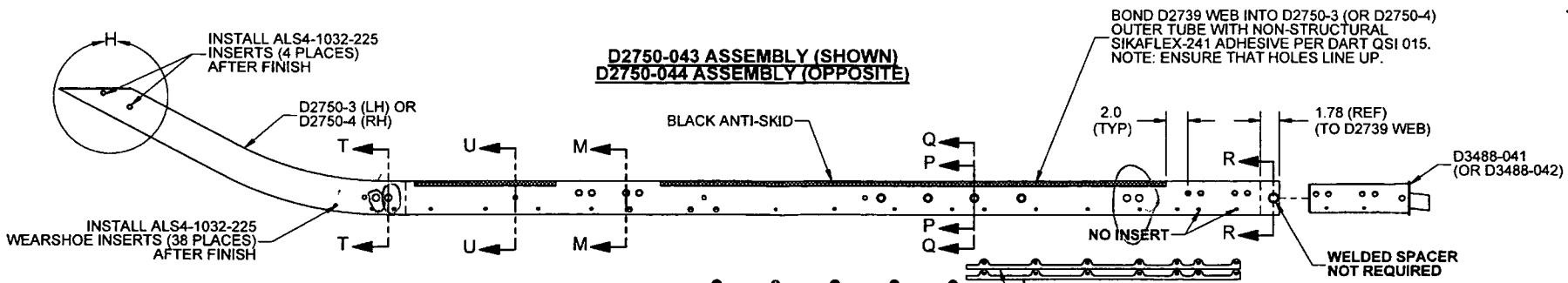
The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 08-03-06

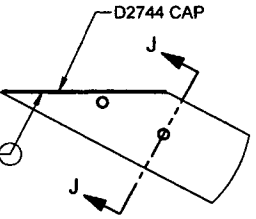
Qualifier Pat Dinkel

8 7 6 5 4 3 2 1

**D2750-043 ASSEMBLY (SHOWN)
D2750-044 ASSEMBLY (OPPOSITE)**



RELEASED
07-08-02



DETAIL H
SCALE 1:5



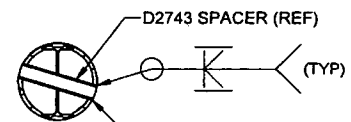
SECTION J-J
SCALE 1:5



SECTION N-N
SCALE 1:5



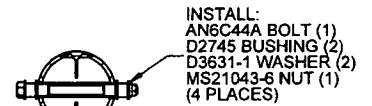
SECTION U-U
SCALE 1:5



SECTION M-M
SCALE 1:5



SECTION P-P
SCALE 1:5

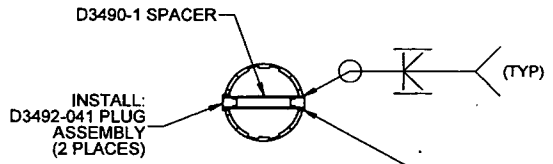


SECTION Q-Q
SCALE 1:5

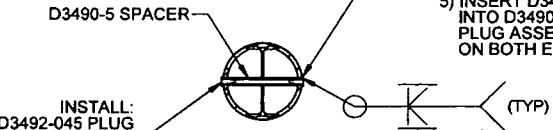


SECTION R-R
SCALE 1:5

- WELDING INSTRUCTIONS**
- 1) CHAMFER HOLE 0.050 x 45°
 - 2) INSERT D2743 SPACER
 - 3) WELD INTO PLACE
 - 4) GRIND WELD FLUSH
 - 5) DRILL OUT SPACER TO Ø0.484
 - 6) SPOT FACE Ø0.750 (SECTION P-P ONLY)



SECTION T-T
(FOR Ø0.500 HOLES ONLY)
SCALE 1:5



SECTION U-U
(FOR Ø0.313 HOLES ONLY)
SCALE 1:5

- WELDING INSTRUCTIONS**
- 1) CHAMFER HOLE 0.050 x 45°
 - 2) INSERT D3490-5 SPACER (4 PLACES) INTO Ø0.313 HOLES OR INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES
 - 3) WELD INTO PLACE
 - 4) GRIND WELD FLUSH
 - 5) INSERT D3492-045 PLUG ASSEMBLY (8 PLACES) INTO D3490-5 SPACER OR INSERT D3492-043 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER ON BOTH ENDS AFTER FINISH

NO. 138095

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DESIGN PH	DRAWN BY CB	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED PH	APPROVED [Signature]	DRAWING NO. D2750	REV. E SHEET 5 OF 5
DATE 07.05.17	TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:10	

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INSTALL ALS4-1032-225
INSERTS (4 PLACES)
AFTER FINISH

D2750-1 (LH) OR
D2750-2 (RH)

INSTALL ALS4-1032-225
WEARSHOE INSERTS (38 PLACES)
AFTER FINISH

**D2750-041 ASSEMBLY (SHOWN)
D2750-042 ASSEMBLY (OPPOSITE)**

BLACK ANTI-SKID

BOND D2739 WEB INTO D2750-1 (OR D2750-2)
OUTER TUBE WITH NON-STRUCTURAL
SIKAFLEX-241 ADHESIVE PER DART QSI 015.
NOTE: ENSURE THAT HOLES LINE UP.

2.0
(TYP)

1.78 (REF)
(TO D2739 WEB)

D3488-041
(OR D3488-042)

NO INSERT

WELDED SPACER
NOT REQUIRED

D3535-35
D3536-35

AN3C7A BOLT (REF)

D3537-1

RELEASED
07.08.02

D2744 CAP

DETAIL H
SCALE 1:5

INSTALL:
AN3C6A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(4 PLACES)

SECTION J-J
SCALE 1:5

INSTALL AT AFTMOST
D3537-1 WEARPAD:
AN3C7A BOLTS (1)
AN960C10L WASHER (1)
(4 PLACES)

INSTALL:
AN3C5A BOLT (1)
AN960C10L WASHER (1)
(38 PLACES)

SECTION N-N
SCALE 1:5

D2743 SPACER (REF)
(TYP)

SECTION M-M
SCALE 1:5

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 x 45°
2) INSERT D2743 SPACER
3) WELD INTO PLACE
4) GRIND WELD FLUSH
5) DRILL OUT SPACER TO Ø0.484
6) SPOT FACE Ø0.750 (SECTION P-P ONLY)

INSTALL:
AN6C44A BOLT (1)
D2745 BUSHING (2)
D3631-1 WASHER (2)
MS21043-6 NUT (1)
(4 PLACES)

SECTION Q-Q
SCALE 1:5

INSTALL:
AN8C35A BOLT (1)
AN960C816L WASHER (2)
NAS1515H8L WASHER (2)
MS21083C8 NUT (1)

SECTION R-R
SCALE 1:5

D3490-3 SPACER
INSTALL:
D3492-043 PLUG
ASSEMBLY
(2 PLACES)

SECTION K-K
(FOR Ø0.750 HOLES ONLY)
SCALE 1:5

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 x 45°
2) INSERT D3490-1 SPACER (4 PLACES) INTO
Ø0.500 HOLES OR INSERT D3490-3 SPACER
(4 PLACES) INTO Ø0.750 HOLES
3) WELD INTO PLACE
4) GRIND WELD FLUSH
5) INSERT D3492-041 PLUG ASSEMBLY (8 PLACES)
INTO D3490-1 SPACER OR INSERT D3492-043
PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER
ON BOTH ENDS AFTER FINISH

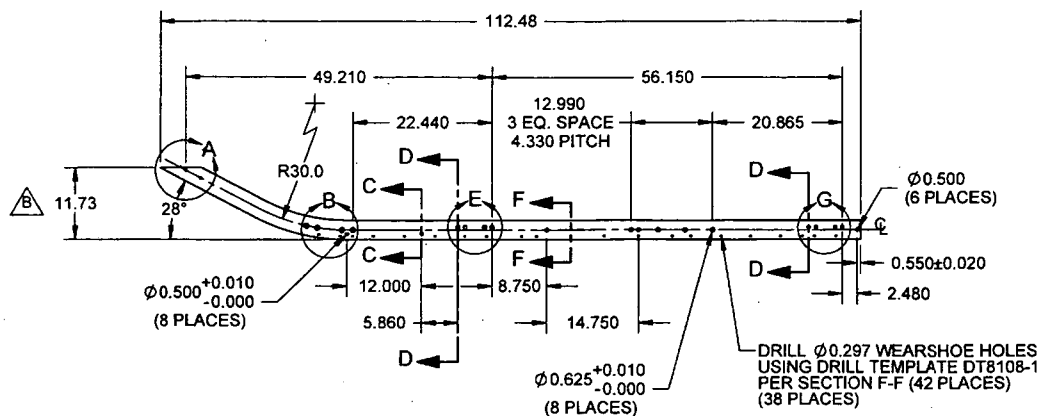
D3490-1 SPACER

INSTALL:
D3492-041 PLUG
ASSEMBLY
(2 PLACES)

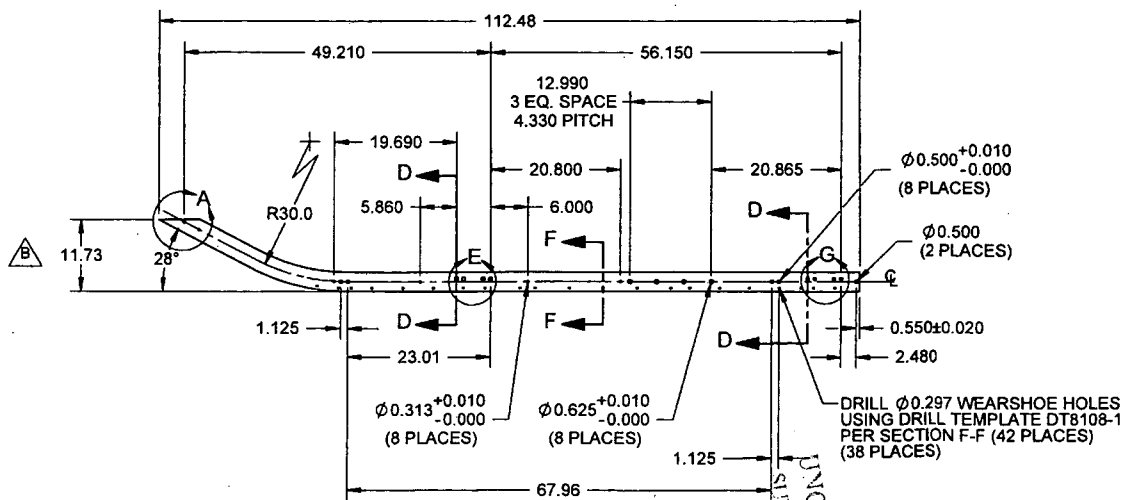
SECTION L-L
(FOR Ø0.500 HOLES ONLY)
SCALE 1:5

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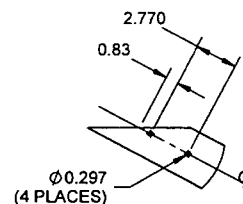
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DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:10
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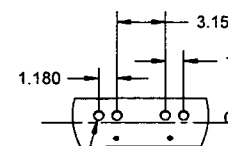
D2750-1 LH SKIDTUBE (SHOWN)
D2750-2 RH SKIDTUBE (OPPOSITE)



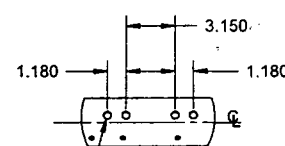
D2750-3 LH SKIDTUBE (SHOWN)
D2750-4 RH SKIDTUBE (OPPOSITE)



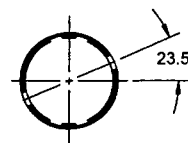
DETAIL A
SCALE 1:8



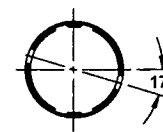
DETAIL E
SCALE 1:8



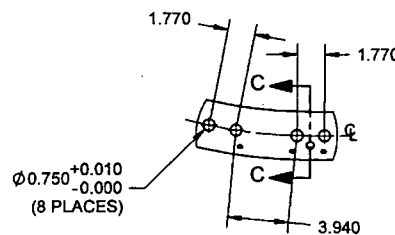
DETAIL G
SCALE 1:8



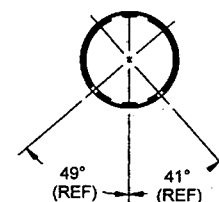
SECTION C-C
SCALE 1:4



SECTION D-D
SCALE 1:4



DETAIL B
SCALE 1:8
(ALL DIMENSIONS ARE STRAIGHT LINE DIMENSIONS)



SECTION F-F
SCALE 1:4

RELEASED
01-08-02

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DATE 07.05.17	TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:20	

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DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY SCALE NTS	

GENERAL NOTES:

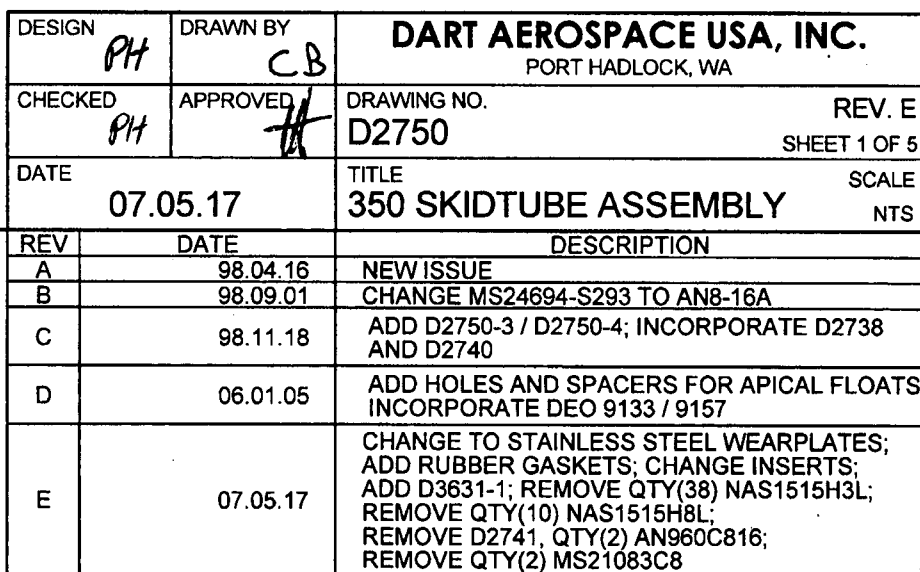
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07-08-02 [Signature]

1. ALL DIMENSIONS ARE IN INCHES.
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.15 ± 0.030 IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS C-C, D-D AND F-F.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'F' SIZE HOLES ($\emptyset 0.297$) FOR WEARSHOE INSERTS.
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3C5A/AN3C7A WEARSHOE BOLTS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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07-08-02

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D2750-041	SKIDTUBE ASSEMBLY, LH
	X			D2750-042	SKIDTUBE ASSEMBLY, RH
		X		D2750-043	SKIDTUBE ASSEMBLY, LH
			X	D2750-044	SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-13	WEARSHOE
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3535-35	WEARSHOE
1	1	1	1	D3536-13	GASKET
1	1	1	1	D3536-25	GASKET
1	1	1	1	D3536-35	GASKET
5	5	5	5	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
42	42	42	42	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
2	2	2	2	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER
2	2	2	2	NAS1515H8L	WASHER

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

55.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-012

PPP New

8/4/17

56.0

QC21

FINAL INSPECTION/W/O RELEASE



08/04/18

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF

68-04-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

48.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Washer
Batch: M107520

49.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Nut
Batch: M107650

50.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Bolt
Batch: M107596

51.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
WASHER
Batch: M107581

52.0

D34931

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
WASHER
Batch: 36037

53.0

D35321

spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
spacer
Batch: 33085

54.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

B 38095

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

42.0

NAS1515H3L

WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

WASHER

Batch: M106516

BR

43.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M107581

BR

44.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3"

batch: M105005

>

BR

08-04-11

3-Install blade fitting D3488-042, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: M107397

EXP DATE: 08/10

>

M-L

08/04/16

(1X)

4-Coat all exposed fasteners with "LPS Procyon"

batch: M104251

45.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/04/15 (X)

46.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

47.0

D2741

Blade



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Blade

Batch: 36343

08/04/16 (X)

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

35.0

AN3C7A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Batch: M 105906

BR

36.0

AN6C44A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Batch: M 10734

BR

37.0

AN8C35A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

BOLT

Batch: M 102671

BR

38.0

AN960C10L

washer



Comment: Qty.: 46.0000 Each(s)/Unit Total : 46.0000 Each(s)

washer

Batch: M 107376

BR

39.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M 106513

BR

40.0

MS210436

NUT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

NUT

Batch: M 103693

BR

41.0

MS21083C8

NUT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

NUT

Batch: M 106431

BR

BR 08-04-11

①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description:

28.0

D35371

WEARPAD



*

Comment: Qty.: 5.0000 Each(s)/Unit Total: 5.0000 Each(s)

WEARPAD

Batch: *B38254 (1) BL*

B37292

(4X) m/l

29.0

D36311

WASHER



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

WASHER

Batch: *B34276*

BL

30.0

D3488042

BLADE FITTING ASSEMBLY, RH



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Blade Fitting, RH

Batch: *B35587*

BL

31.0

D3492041

PLUG ASSEMBLY



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

PLUG ASSEMBLY

Batch: *B36902*

BL

32.0

D3492043

PLUG ASSEMBLY



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

PLUG ASSEMBLY

Batch: *B36237*

BL

33.0

AN3C5A

Bolt



Comment: Qty.: 38.0000 Each(s)/Unit Total: 38.0000 Each(s)

Bolt

Batch: *M106780*

BL

34.0

AN3C6A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Bolt

Batch: *M105300*

BL

BL 08-04-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Bushing

Batch: B 34817

BL

22.0

D353513

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B 37584

BL

23.0

D353525

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B 37892

BL

24.0

D353535

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B 36425

BL

25.0

D353613

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B 36635

BL

26.0

D353625

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B 36636

BL

27.0

D353635

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B 38183

BL

BL 08-04-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

8-Grind welds flush as per Dwg D2750

9-Spot face ground handling holes ~~section 2~~ (total of 4 places per side) as per dwg D2750

10-Deburr holes

14.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 08-04-08

BL 8-48
08/04/08 (u)

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/04/08 (u)

16.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
Pressure wash as per QSI 005

HL

08-04-09 (x)

17.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

M 107550

BL 08-04-09

(D)

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION
Inspect for foreign object per QSI 024

HL

08-04-10

(x)

19.0

ALS41032225

Insert



Comment: Qty.: 42.0000 Each(s)/Unit Total : 42.0000 Each(s)

Insert

Batch: M 100621

BL

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
1-Install inserts as per dwg D2750

BL 08-04-10

BL 08-04-10 P

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

D34901

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Crossbolt spacer

Batch: *233824*

BE 08/04/08

11.0

D34903

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Crossbolt spacer

Batch: *233825*

BE 08/04/08

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

Crossbolt Spacer

Batch: *236030*

BE 08/04/08

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

E and ground handling
1-Open up holes of Detail *B* & Detail *G* to 0.625" (total of 8 holes per side)
as per dwg D2750.

2-Open up holes of Detail *B* to 0.750" (total of 4 holes per side)
as per dwg D2750.

3-Open float holes to .500" (4 per Side)

Detail B, E, ground handling and float holes
4-Chamfer holes of Detail *V*, Detail *C*, Detail *D* and hole size *1/4"* per dwg D2750 (welding instructions on sheet 4)

5-Deburr and blow out all chips from inside of tube

6-Prepare tube for welding, remove alodine as required.

6-Bond web D2739 in place as per QSI 015

A/R

Sikaflex-291

batch: *107397*

exp. date: *8-7-31*

7- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004
(welding instructions on sheet 4)

A/R

Aluminum Rod

batch: *M107263*

BE 08/04/08

M 2-cr7
2-2A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/18/2008 3:57:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 38095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut as per dwg D2750.

4-Drill pilot holes for Detail ⁶ using DT8330 for L.H. and DT 8329 for R.H.

5-Open up holes for Detail B, "hole size W" and blade fitting location holes to 0.500" (total of 8 holes per side) as per dwg D2750. ⁵ Open holes for ground handling and detail E to 0.500. (8 holes per side) 8-4-2

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 and open to 0.297" ***Make sure that wearplate holes are on bottom of tube***** open 4 aft wearplate holes to 0.250. open remaining wearplate holes to 0.297

7-Open up holes of Detail A to 0.250" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004

A/R

Aluminum Rod

M106330 B6 08/04/03

10-Grind welds flush as per Dwg D2750

VISUAL WELDING INSPECTION

5.0

QC10



Comment: VISUAL WELDING INSPECTION

PD 080104 / S 080104 (C)

6.0

QC5



Comment: INSPECT WORK TO CURRENT STEP

S 080404 (C)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

AWM 8-4-07

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

DP 8-4-7

9.0

D2739

350 I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Web

Batch:

B 36871 (C) 8-4-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

14

Date: Tuesday, 3/18/2008 3:57:51 PM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
Job Number : 38095
Estimate Number : 10265
P.O. Number :
This Issue : 3/18/2008 S.O. No. :
Prsht Rev. : NC
First Issue : 1/1 Type : LANDING GEAR
Previous Run : 36607
Written By :
Checked & Approved By : Aug 0318
Comment : Est Rev: I 02-09-25 Rearranged procedure steps KJ
Est Rev: J 06-03-29 As per Rev D EC
Est Rev: K 06-07-13 As per dsi9343 EC
Est Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM
Verified By: EC

Drawing Name : 350 SKIDTUBE ASSEMBLY RH
Part Number : D350636012
Drawing Number : D2750 REV E
Project Number : N/A
Drawing Revision : E
Material :
Due Date : 4/4/2008 Qty: 1 Um: Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	DC	DOCUMENT CONTROL



*Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-012 CHG 003

08/03/25
08/04/17
H 8-4-2

2.0

D26003BENT

Extrusion Bent



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2600-3-Bent

Extrusion (Bent)

B 37858

① H 8-4-2

3.0

D2744

Fwd Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cap

Batch: 33996

SL 8-4-2

4.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 & DT8863 drilling holes labelled "A" only.

Removal.

H
8-4